

AMENDMENTS TO THE CLAIMS

1) (Currently Amended): A system for manufacturing containers, ~~in particular for preserving feed products~~, comprising a supporting structure ~~(2)~~, the system ~~(1)~~ being composed entirely of parts associated with the supporting structure ~~(2)~~, including namely:

a forming sector ~~(3)~~ supplied with a continuous strip ~~(8, 12)~~ of forming material ~~(9)~~ used in preparation of at least one blank ~~(4)~~ from which to fashion a respective container ~~(5)~~, and establishing a first leg ~~(B)~~ of a feed path followed by the material ~~(9)~~, the forming material comprising at least a paper material:

a transfer device ~~(20)~~ operating downstream of the forming sector ~~(3)~~, serving to distance the forming material ~~(9)~~ from the forming sector ~~(3)~~ and establishing a second leg ~~(C)~~ of the feed path followed by the material; and

and a shaping sector ~~(6)~~ operating downstream of the forming sector ~~(3)~~, by which each blank ~~(4)~~ emerging from the sector ~~(3)~~ is folded and caused ultimately by means of a fixing operation to assume the shape of the container ~~(5)~~ produced by the folding step, the shaping sector ~~(6)~~ establishing a third leg ~~(D)~~ of the feed path followed by the forming material ~~(9)~~;

the first leg ~~(B)~~ of the feed path extending substantially parallel to the longitudinal dimension of the supporting structure ~~(2)~~;

the second leg ~~(C)~~ of the feed path extending transversely to the first leg ~~(B)~~;

the third leg ~~(D)~~ of the feed path extending substantially parallel to the first leg ~~(B)~~ and transversely to the second leg ~~(C)~~; and

characterized in that the first, second and third legs being ~~(B, C, D)~~ are disposed in such a manner that the forming material ~~(9)~~ will follow a feed path ~~(A)~~ extending externally of the supporting structure ~~(2)~~ at least in part,

and presenting substantially a C-shaped ~~letter C~~ configuration by which the supporting structure is circumscribed at least in part.

2) (Currently Amended) A system as in claim 1, wherein the forming sector ~~(3)~~ and the shaping sector ~~(6)~~ are arranged in line operationally, so that the path followed by the forming material ~~(9)~~ when advancing between the forming sector ~~(3)~~ and the shaping sector ~~(6)~~ is substantially linear.

3) (Currently Amended) A system as in claim 2, wherein the shaping sector ~~(6)~~ comprises at least two substantially parallel shaping lines ~~(6a)~~ onto which the forming material ~~(9)~~ emerging from the forming sector ~~(3)~~ is directed.

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6) (Currently Amended) A system as in claim 3, wherein the forming sector ~~(3)~~ comprises:

a feed station ~~(7)~~ supplying the forming material ~~(9)~~;

a cutting station ~~(19)~~ operating downstream of the feed station ~~(7)~~, by which the forming material ~~(9)~~ is divided into a succession of discrete lengths each constituting a respective blank ~~(4)~~;

a scoring station ~~(18)~~ operating downstream of the feed station ~~(7)~~, by which at least one crease line ~~(4a)~~ is applied to each length of forming material ~~(9)~~ constituting a blank ~~(4)~~; and

a preforming station ~~(21)~~ operating downstream of the feed station ~~(7)~~, by which the forming material ~~(9)~~ is bent initially along the crease line ~~(4a)~~.

7) (Currently Amended) A system as in claim 6, wherein the feed station ~~(7)~~ comprises at least one main supply reel ~~(10)~~ carrying a coiled continuous

strip ~~(8)~~ of the forming material ~~(9)~~ and rotatable about a respective longitudinal axis ~~(X)~~ in such a way that the continuous strip ~~(8)~~ of forming material ~~(9)~~ can be decolled.

8) (Currently Amended) A system as in claim 7, wherein the feed station ~~(7)~~ comprises at least one auxiliary supply reel ~~(11)~~ carrying a further continuous strip ~~(12)~~ of the forming material ~~(9)~~ that can be spliced to the continuous strip ~~(8)~~ of the main reel ~~(10)~~ to guarantee continuity of the supply of forming material ~~(9)~~, each supply reel ~~(10, 11)~~ being replaceable, on final depletion of the relative forming material ~~(9)~~, with a further reel ~~(10, 11)~~ carrying a fresh supply of the forming material ~~(9)~~.

9) (Currently Amended) A system as in claim 6, wherein the first leg ~~(B)~~ of the feed path ~~(A)~~ followed by the forming material ~~(9)~~ is established by a plurality of guide elements ~~(13)~~ constituting part of the feed station ~~(7)~~.

10) (Currently Amended) A system as in claim 7, further comprising a traction device ~~(14)~~ operating by direct interaction with the forming material ~~(9)~~ at a point downstream of the feed station ~~(7)~~ and serving to decoil the selfsame material from the relative supply reel ~~(10, 11)~~.

11) (Currently Amended) A system as in claim 10, wherein the traction device ~~(14)~~ comprises a pair of pinch rolls ~~(14a)~~, positioned mutually tangential and establishing a passage ~~(14b)~~ through which the forming material ~~(9)~~ is directed, including at least one roll ~~(14a)~~ that can be power driven in rotation to the end of advancing the forming material ~~(9)~~ through the passage ~~(14b)~~ of the device ~~(14)~~.

12) (Currently Amended) A system as in claim 10, further comprising at least one tensioning device ~~(16)~~ operating upstream of the traction device ~~(14)~~ and in such a manner that the segment of forming material ~~(9)~~ extending downstream of the selfsame device ~~(16)~~ is subjected to a predetermined longitudinal tension.

13) (Currently Amended) A system as in claim 12, wherein the tensioning device ~~(16)~~ comprises at least one pair of pinch rolls ~~(16a)~~, positioned mutually tangential and establishing a passage ~~(16b)~~ through which the forming material ~~(9)~~ is directed, including at least one roll ~~(16a)~~ subjected to a braking action when in rotation in such a way as to tension the forming material ~~(9)~~ advancing through passage ~~(16b)~~ of the device ~~(16)~~.

14) (Currently Amended) A system as in claim 12, comprising at least one sterilizing device ~~(17)~~ operating along the feed path ~~(A)~~ followed by the forming material ~~(9)~~ and serving to debacterialize the selfsame material.

15) (Currently Amended) A system as in claim 14, wherein the sterilizing device ~~(17)~~ operates on the forming material ~~(9)~~ at a point between the tensioning device ~~(16)~~ and the traction device ~~(14)~~.

16) (Currently Amended) A system as in claim 1, wherein the scoring station ~~(18)~~ is positioned to operate at a point along the feed path ~~(A)~~ followed by the forming material ~~(9)~~, between the feed station ~~(7)~~ and the cutting station ~~(19)~~.

17) (Currently Amended) A system as in claim 16, wherein the scoring station ~~(18)~~ comprises at least one press ~~(18a)~~ presenting mutually opposed dies ~~(18b)~~ offered to the two faces of the forming material ~~(9)~~, capable of alternating

between an idle position in which the dies ~~(1-8b)~~ are distanced from the forming material ~~(9)~~ interposed between them, and an operating position in which they are brought together forcibly against the forming material ~~(9)~~ in such a way as to generate the crease line ~~(4a)~~.

18) (Currently Amended) A system as in claim 17, wherein the cutting station ~~(19)~~ comprises at least one blade ~~(19a)~~ positioned to operate in close proximity to the scoring station ~~(18)~~ in such a way that the forming material ~~(9)~~ can be cut immediately adjacent to the press ~~(18a)~~, capable of alternating between an idle position distanced from the forming material ~~(9)~~, and an operating position of engagement with the selfsame material ~~(9)~~, in which a blank ~~(4)~~ is separated.

19) (Currently Amended) A system as in claim 18, wherein the blade ~~(19a)~~ of the cutting station ~~(19)~~ can be timed to alternate between the idle position and the operating position synchronously with the movement of the press ~~(18a)~~ of the scoring station ~~(18)~~ between the relative idle position and operating position, in such a manner that the press ~~(18a)~~ of the scoring station ~~(18)~~ and the blade ~~(19a)~~ of the cutting station ~~(19)~~ are made to engage the advancing forming material ~~(9)~~ simultaneously.

20) (Currently Amended) A system as in claim 1, wherein the transfer device ~~(20)~~ comprises at least one gripper element ~~(20b)~~ serving to take up each blank ~~(4)~~ of forming material ~~(9)~~ released from the cutting station ~~(19)~~, and capable of movement along the second leg ~~(C)~~ of the feed path between the cutting station ~~(19)~~ and the shaping sector ~~(6)~~ to the end of advancing each successive blank ~~(4)~~.

21) (Currently Amended) A system as in claim 6, wherein the ~~prefolding~~ preforming station ~~(21)~~ operates at a point on the second leg ~~(C)~~ of the feed path downstream of the cutting station ~~(19)~~, in such a manner as to initiate a bend in the length of forming material ~~(9)~~ constituting each blank ~~(4)~~ along the relative crease line ~~(4a)~~ generated by the scoring station ~~(18)~~.

22) (Currently Amended) A system as in claim 10, further comprising a finishing device ~~(22)~~ associated with the feed station ~~(7)~~ and designed to operate on at least one bonding edge ~~(4b)~~ of the advancing forming material ~~(9)~~ in such a way that the bonding edge of the single blank ~~(4)~~ is rendered suitable for positioning on the inside of the relative container ~~(5)~~.

23) (Currently Amended) A system as in claim 22, wherein the finishing device ~~(22)~~ operates between the tensioning device ~~(16)~~ and the traction device ~~(14)~~.

24) (Currently Amended) A system as in claim 23, wherein the finishing device ~~(22)~~ comprises: seam-folding means by which the bonding edge ~~(4b)~~ is bent double along its length in such a way that the bonding edge ~~(4b)~~ of each blank will present a treated portion directed toward the inside of the relative container ~~(5)~~; also fixing means by which to secure the bonding edge ~~(4b)~~ in the bent configuration.

25) (Currently Amended) A system as in claim 23, wherein the finishing device ~~(22)~~ comprises application means by which to lay a fillet of treated material ~~(23)~~ over the raw edge of the advancing material ~~(9)~~, so that the bonding edge ~~(4b)~~ of each blank will be covered by a layer of material suitable for positioning on the inside of the relative container ~~(5)~~.

26) (Currently Amended) A system as in claim 1, wherein the shaping sector ~~(6)~~ comprises: a folding station ~~(24)~~ at which each blank ~~(4)~~ is bent along the crease lines ~~(4a)~~ in such a way as to take on the shape of the container ~~(5)~~ being manufactured, and a sealing or welding station ~~(25)~~ located downstream of the folding station ~~(24)~~, where each blank ~~(4)~~ is secured in the configuration presented on emerging from the folding station ~~(24)~~ to assume the definitive shape of the relative container ~~(5)~~.

27) (Currently Amended) A system as in claim 26, wherein the sealing or welding station ~~(25)~~ comprises at least one sealer or welder such as will fix each blank ~~(4)~~ in the definitive configuration of the manufactured container ~~(5)~~.

28) (Currently Amended) A system as in claim 27, further comprising an assembly station ~~(26)~~ operating between the folding station ~~(24)~~ and the sealing or welding station ~~(25)~~ and serving to apply at least one neck ~~(5a)~~ to each folded blank ~~(4)~~ emerging from the folding station ~~(24)~~, wherein each neck ~~(5a)~~ is fixed to the folded blank ~~(4)~~ at the sealing or welding station ~~(25)~~ through the agency of the sealer or welder.

29) (Currently Amended) A system as in claim 1, further comprising feed means associated with the supporting structure ~~(2)~~ and serving to guarantee the movement of the forming material ~~(9)~~ between the stations ~~(7, 18, 19, 21, 24, 25)~~ of the system ~~(1)~~, wherein such means comprise the transfer device ~~(20)~~ and cause the forming material ~~(9)~~ to pass from one station ~~(7, 18, 19, 21, 24, 25)~~ to the next substantially at a predetermined and uniform time tempe.

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Claims 30-39 (Cancelled)